Workshop on the Hazardous Waste Generator Improvements Rule

US EPA Region 7

Dubuque Hazardous Waste Generator Compliance and Management Workshop

March 7, 2018

NOTE: These slides are tailored for EPA-direct implementation in Iowa

As we go through this workshop - What resources can we provide to assist YOU?

Some possible resources

- Fact Sheets
- Guides
- Workshops
- Examples of ...
- Other?



Content Survey - What is Most Important to YOU?

Evaluate Each Module/Section

- Unnecessary
- Too Simple
- Too Technical
- About Right
- Excellent





FINE PRINT AHEAD

Comparison of Old § 261.5 vs. New § 262.13

New Old 262.13 (c) 261.5(c) (c) When making the monthly quantity-based determinations required by (c) When making the quantity determinations of this part and 40 CFR part this part, the generator must include all hazardous waste that it generates, 262, the generator must include all hazardous waste that it generates, except hazardous waste that: except hazardous waste that: (1) Is exempt from regulation under 40 CFR 261.4(c) through (f), 261.6((1) Is exempt from regulation under 40 CFR 261.4(c) through (f), a)(3), 261.7(a)(1), or 261.8; 261.6(a)(3), 261.7(a)(1), or 261.8; or (2) Is managed immediately upon generation only in on-site elementary (2) Is managed immediately upon generation only in on-site elementary neutralization units, wastewater treatment units, or totally enclosed neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in 40 CFR 260.10; treatment facilities as defined in 40 CFR 260.10; or (3) Is recycled, without prior storage or accumulation, only in an on-site (3) Is recycled, without prior storage or accumulation; only in an on-site process subject to regulation under 40 CFR 261.6(c)(2); process subject to regulation under 40 CFR 261.6(c)(2); or (4) Is used oil managed under the requirements of 40 CFR 261.6(a)(4) and (4) Is used oil managed under the requirements of 40 CFR 261.6(a)(4) and 40 CFR part 279; 40 CFR part 279; or (5) Is spent lead-acid batteries managed under the requirements of 40-(5) Is spent lead-acid batteries managed under the requirements of 40 CFR. CFR part 266 subpart G; part 266; subpart G; es (6) Is universal waste managed under 40 CFR 261.9 and 40 CFR part 273; (6) Is universal waste managed under 40 CFR 261.9 and 40 CFR part 273; (7) Is a hazardous waste that is an unused commercial chemical product (7) Is a hazardous waste that is an unused commercial chemical product (listed in 40 CFR part 261 subpart D or exhibiting one or more (listed in 40 CFR part 261, subpart D or exhibiting one or more characteristics in 40 CFR part 261 subpart C) that is generated solely as a characteristics in 40 CFR part 261, subpart C) that is generated solely as a result of a laboratory clean-out conducted at an eligible academic entity result of a laboratory clean-out conducted at an eligible academic entity pursuant to § 262.213. For purposes of this provision, the term eligible pursuant to §262.213. For purposes of this provision, the term eligible academic entity shall have the meaning as defined in §262,200 of Part 262. academic entity shall have the meaning as defined in § 262.200; or (8) Is managed as part of an episodic event in compliance with the conditions of subpart L of this part.

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Module 1: Goals and Background of the Generator Improvements Rule

Contents of Module 1

- History of the Hazardous Waste Generator Improvements Rule
- Generator Universe
- Goals of the Final Rule
- Reorganization of the Generator Regulations

History of the Hazardous Waste Generator Improvements Rule

- Most of the generator rules were promulgated in the 1980s and are over thirty years old
- In 2004, EPA conducted an evaluation of the generator program to improve program effectiveness, reduce compliance costs, and foster an improved relationship with states and the regulated community, published a Notice (April 22, 2004, 69 FR 21800) and held four public meetings soliciting comment on the effectiveness of the generator program
 - Comments included: simplify the regulations, eliminate cross-referencing, codify guidance, provide flexibility for episodic generators, require re-notification for SQGs, provide onepager basic information for contingency planning, clarify ambiguities, clarify concepts in satellite accumulation among others

History of the Hazardous Waste Generator Improvements Rule

- After 2004, ORCR took a number of non-regulatory actions to respond to public comments and to improve the generator program:
 - Improved user-friendliness of generator website
 - Developed online guide to the "Hazardous Waste Generator Regulations"
 - Released "Closed Container" guidance
 - Issued memo for turnover of hazardous waste in tanks
 - Issued a Technical Corrections (direct final) rule
- We also engaged in further program evaluation
 - 2012 Hazardous Waste Determination Program Evaluation
 - 2014 Retail NODA OMB Retrospective Review
- However, EPA determined that many of the existing issues with the generator regulations could only be resolved through rulemaking.
- The September 25, 2015, proposed rule grew out of all of these evaluations and presented more than 60 proposed changes to the generator regulations, plus technical corrections, for public comment.

History of the Hazardous Waste Generator Improvements Rule

- Over 230 public comments were received on the Generator Improvements Proposed Rule
- The commenters included:
 - 25 states
 - 10 local governments
 - More than 50 from academic institutions
 - About a dozen from the energy sector/utilities
 - More than 25 from industry and related trade associations
 - 10 from the waste management industry
- Comments covered all aspects of the rule, particularly waste determinations and marking and labeling; independent requirements and conditions for exclusion; VSQG consolidation; and episodic generation

Generator Universe

Generator Category	Number of Facilities	Total Hazardous Waste Generated (tons)	Percent of Total Hazardous Waste Generated	2017 Iowa Number/ % National
VSQGs	353,400– 591,800	46,000– 148,000	<1%	3832 / 1%
SQGs	49,900– 64,300	66,000-141,000	<1%	895 / 2%
LQGs	20,800	35.2 million	99%	191 / 1%
Total	424,100– 676,900	35·3–35·4 million	100%	4918 / 1%

^{*} Numbers of VSQGs and SQGs are estimates based on Biennial Report (BR) and limited state data. LQG number is derived from 2013 BR. The Iowa data is from the RCRA database.

Goals of the Final Rule

The 2016 HW Generator Improvements Final Rule —

- Over 60 changes to Hazardous Waste Generator Program that:
 - Reorganizes the regulations to make them more user-friendly and thus enables improved compliance by the regulated community
 - Provides greater flexibility for hazardous waste generators to manage waste in a cost-effective manner through episodic generation and VSQG-LQG consolidation provisions
 - Strengthens environmental protection by addressing identified gaps in the regulations
 - Clarifies certain components of the hazardous waste generator program to address ambiguities and foster improved compliance

Reorganization of Generator Regulations

Provision	Existing Citation	Proposed Citation
Generator Category Determination	§ 261.5(c)–(e)	§ 262.13
VSQG Provisions	§ 261.5(a), (b), (f)–(g)	§ 262.14
Satellite Accumulation Area Provisions	§ 262.34(c)	§ 262.15
SQG Provisions	§ 262.34(d)–(f)	§ 262.16
LQG Provisions	§ 262.34(a), (b), (g)–(i), (m)	§ 262.17

As part of this reorganization, the Agency made conforming changes to citations that reference § 261.5 and § 262.34

Note: See Crosswalk Handout for more details about reorganization.

Definitions of Terms

§ 260.10

- Acute hazardous waste/ Non-acute hazardous waste
- Central Accumulation Area
- Large Quantity Generator (LQG) / Small Quantity Generator (SQG) /

Very Small Quantity Generator (VSGQ)

§ 262.1

"Condition for exemption" versus "Independent requirement"

Module 2: Independent Requirements for All Generators

Contents of Module 2

- Hazardous Waste Determinations
- Counting and HW Generator Categories
- Mixing
- Marking and Labeling

Hazardous Waste Determinations

Hazardous Waste Determinations: What Changes and Why?

What changes?

- Clarifies and emphasizes that waste determinations must be accurate!
- Confirms <u>when</u> a generator's hazardous waste determination must be made
- Elaborates on <u>how</u> to determine if a solid waste is either a listed and/or characteristic hazardous waste
- Reiterates what waste determination records must be kept
- Requires SQGs and LQGs to identify and mark RCRA waste codes on containers prior to sending hazardous waste off-site per § 262.32

Why did we make these changes?

- To improve generator compliance
- The most frequent noncompliance point for generators is making an accurate hazardous waste determination, which can result in the mismanagement of hazardous waste
 - Non-compliance rates range from 10 to 30 percent
 - Reasons vary from not understanding RCRA to not even being aware of RCRA
- Making an accurate hazardous waste determination reduces Domino Effect
 - Hazardous waste most likely will be managed safely from "cradle to grave"

Making a Hazardous Waste Determination

- § 262.11(a) The hazardous waste determination for each solid waste must be made
 - at the point of waste generation,
 - before any dilution, mixing, or other alteration of the waste occurs,
 - and at any time in the course of its management that it has, or may have, changed its properties as a result of exposure to the environment or other factors that may change the properties of the waste such that the RCRA classification of the waste may change.

§ 262.11(a) Hazardous Waste Determination

The hazardous waste determination for each solid waste <u>must be</u> made at the point of waste generation,...

RCRA Statute is clear:

The term "hazardous waste generation" means the act or process of producing hazardous waste. See Solid Waste Disposal Act, Section 1004.

Why at the point of waste generation?

- To Ensure:
 - Proper waste identification
 - Proper handling and management from "cradle to grave"
 - Compliance with Land Disposal Restrictions (LDRs)

§ 262.11(a) Hazardous Waste Determination

The hazardous waste determination for each solid waste must be made at the point of waste generation, before any dilution, mixing, or other alteration of the waste occurs, ...

- We added this language to make it clear that you need to characterize your waste <u>before</u> dilution, mixing or alteration
- Alteration of waste: May change waste properties and subsequent handling

Example: A facility chooses to mix spent sand blast media from generation points A, B, and C. The facility must evaluate the sand blast media from each point of generation, prior to mixing, if the wastes are not the same.

- Point A is used to remove yellow paint from old military vehicles.
- Point B is used for blasting unpainted steel.
- Point C is used for all non-military clients' vehicles.



§ 262.11(a) Hazardous Waste Determination

The hazardous waste determination for each solid waste must be made at the point of waste generation, before any dilution, mixing, or other alteration of the waste occurs, and at any time in the course of its management that it has, or may have, changed its properties as a result of exposure to the environment or other factors that may change the properties of the waste such that the RCRA classification of the waste may change.

Why inclusion of this statement?

At any time in the course of its management...

- Generators need to understand the chemistry and chemical properties of their waste.
- A SW determined to be non-hazardous at the point of generation can in some cases become hazardous over time while being managed on-site through exposure to the environment (reactive wastes), settling (two- or multi-phase solvent waste), etc.

Note: Opposite also true; hazardous wastes can become non-hazardous so long as not diluted or non-LDR compliance treatment

Does this mean you need to monitor your waste 24/7?

Point of generation (other thoughts)

- <u>In rare cases</u>, identifying the point of generation may not always be straightforward
 - Example: Commercial chemical products (e.g., barium sulfate solutions)
- Generators may also take conservative approach and manage non-HW as HW if they so choose
 - Wait until test results come back (or check with the supplier)
 - Play it safe



Generating a Characteristically Hazardous Waste

- When generating a characteristically hazardous waste, a person can rely on generator knowledge to make the determination. Acceptable knowledge may include:
 - process knowledge (e.g., information about chemical feedstocks and other inputs to the production process);
 - knowledge of products, by-products, and intermediates produced by the manufacturing process;
 - chemical or physical characterization of wastes;
 - information on the chemical and physical properties of the materials used or produced by the process or otherwise contained in the waste;
 - testing that illustrates the properties of the waste; or other reliable and relevant information about the properties of the waste or its constituents.
 - A test other than a test method set forth in subpart C of 40 CFR part 261, or an equivalent test method approved by the Administrator under 40 CFR 260.21, may be used as part of a person's knowledge to determine whether a solid waste exhibits a characteristic of hazardous waste.



§262.11(f): Recordkeeping*

A small or large quantity generator must maintain records supporting its hazardous waste determinations, including records that identify whether a solid waste is a hazardous waste, as defined by 40 CFR 261.3.

- Records must be maintained for at least three years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal.
- The records must include, but are not limited to, the following types of information:
 - the results of any tests, sampling, waste analyses, or other determinations made in accordance with this section;
 - records documenting the tests, sampling, and analytical methods used to demonstrate the validity and relevance of such tests;
 - records consulted in order to determine the process by which the waste was generated, the composition of the waste, and the properties of the waste; and
 - records which explain the knowledge basis for the generator's determination, as described at 40 CFR 262.11(d)(1).

^{*}Basic recordkeeping requirement copied from existing 262.40

§262.11(g): RCRA Waste Codes

If the waste is determined to be hazardous, small quantity generators and large quantity generators must identify all applicable EPA hazardous waste numbers (EPA hazardous waste codes) in subparts C and D of part 261. Prior to shipping the waste off site, the generator also must mark its containers with all applicable EPA hazardous waste numbers (EPA hazardous waste codes) according to § 262.32.



§262.11(g): RCRA Waste Codes



A manufacturer, Durant Diecast, was doing a clean-up in the Maintenance Department. They found a drum of used or spent solvent (methyl ethyl ketone) that had been used to clean paint brushes. They over-packed the bad drum. Now what EPA hazardous waste code markings go on the drum?



Ex. 1 HW Determination







Ex. 1 HW Determination





Everyone please do Envelope A – fluorescent lamps.

Then please choose ONE of the following:

- ➤ B Grit blast residue from prepping parts
- ➤ C Foundry blast sand
- ➤ D Waste paint related material

Answers for each exercise (A-D) are contained in the "Key" envelope.



	MODULE 2			
Comparison of New vs. Old §262.11				
New	Old			
A person who generates a solid waste, as defined in 40 CFR 261.2 , must make an accurate determination as to whether that waste is a hazardous waste	A person who generates a solid waste, as defined in 40 CFR 261.2, must determine if that waste is a hazardous waste using the following method:			
(a) The hazardous waste determination for each solid waste must be made at the point of waste generation, before any dilution, mixing, or other alteration of the waste occurs, and at any time in the course of its managementthat may change the properties of the waste such that the RCRA classification of the waste may change.				
(b) A person must determine whether the solid waste is excluded from regulation under 40 CFR 261.4.	(a) He should first determine if the wast is excluded from regulation under 40 CF 261.4.			
(c) If the waste is not excluded under 40 CFR 261.4, the person must then use knowledge of the waste to determine if the waste meets any of the listing descriptions under subpart D of 40 CFR part 261.	(b) He must then determine if the wast is listed as a hazardous waste in subpart D of 40 CFR part 261.			

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Comparison of New vs. Old §262.11

NEW	OLD
(c) Continued Acceptable knowledge that may be used in making an accurate determination as to whether the waste is listed may include waste origin, composition, the process producing the waste, feedstock, and other reliable and relevant information. If the waste is listed, the person may file a delisting petition under 40 CFR 260.20 and	
260.22 to demonstrate to the Administrator that the waste from this particular site or operation is not a hazardous waste.	



Comparison of New vs. Old §262.11 (cont.)

Old New (d) The person then must also determine whether the waste exhibits (c) For purposes of compliance with 40 CFR part one or more hazardous characteristics as identified in subpart C of 40 268, or if the waste is not listed in subpart D of 40 CFR part 261 by following the procedures in paragraph (d)(1) or (2) of CFR part 261, the generator must then determine this section, or whether the waste is identified in subpart C of 40 a combination of both. CFR part 261 by either: (1) The person must apply knowledge of the hazard characteristic of (1) Testing the waste according to the methods set the waste in light of the materials or the processes used to generate forth in subpart C of 40 CFR part 261, or according the waste. Acceptable knowledge may include....; to an equivalent method approved by the testing that illustrates the properties of the waste; or other reliable Administrator under 40 CFR 260.21; or and relevant information about the properties of the waste or its (2) Applying knowledge of the hazard characteristic constituents. A test other than a test method set forth in subpart C of of the waste in light of the materials or the 40 CFR part 261, or an equivalent test method approved by the processes used. Administrator under 40 CFR 260.21, may be used as part of a person's knowledge to determine whether a solid waste exhibits a characteristic of hazardous waste. However, such tests do not, by themselves, provide definitive results. Persons testing their waste must obtain a representative sample of the waste for the testing, as defined at 40 CFR 260.10. (2) When available knowledge is inadequate to make an accurate determination, the person must test the waste according to the applicable methods set forth in subpart C of 40 CFR part 261 or according to an equivalent method approved by the Administrator under 40 CFR 260.21



Comparison of New vs. Old §262.11 (cont.)

NEW	OLD
(e) If the waste is determined to be hazardous, the generator must refer to parts 261, 264, 265, 266, 267, 268, and 273 of this chapter for other possible exclusions or restrictions pertaining to management of the specific waste.	(d) If the waste is determined to be hazardous, the generator must refer to parts 261, 264, 265, 266, 267, 268, and 273 of this chapter for possible exclusions or restrictions pertaining to management of the specific waste.
(f) Recordkeeping for small and large quantity generators.	
(g) Identifying hazardous waste numbers for small and large quantity generators.	

Counting and Hazardous Waste Generator Categories

Determining Generator Category and Hazardous Waste Counting (§ 262.13)

- A hazardous waste generator has always had to know what category of generator it is (VSQG, SQG, or LQG).
- The regulations did not previously present requirements about determining generator categories in a clear and succinct way.
- New § 262.13 clarifies the process for a generator to determine its generator category each calendar month for generators of acute hazardous waste, generators of non-acute hazardous waste, and generators that mix acute and non-acute hazardous wastes.
 - "Acute" hazardous waste and "non-acute" hazardous waste
- This provision also discusses how mixing of hazardous waste with nonhazardous waste impacts generator category.

Hazardous Waste Counting

Introductory language of § 262.13

- A generator must determine its generator category
- The category is based on the amount of hazardous waste that is generated in a calendar month.
- A generator's category can change from month to month.
- The counting requirements are based on the RCRA statute & are critical to the framework of the generator regs

Hazardous Waste Counting

- 262.13 (a): Basic procedures for determining generator category if generating only non-acute hazardous waste or only acute hazardous waste
- 262.13(b): Procedures for determining generator category if generating a combination of acute and non-acute hazardous waste
- 262.13 (c) & (d): Those materials that do not need to be included when counting hazardous waste
 - Existing provisions being moved from 261.5 (c) & (d) + hazardous waste from an episodic event
- 262.13 (e): Statement that a generator uses its determined category to identify which regulations apply

Generating Acute and Non-Acute Hazardous Waste in the Same Month

- Before the final generator rule, EPA had issued contradictory guidance documents on whether a generator could be one category of generator for acute waste and another for non-acute waste in the same month.
- The Generator final rule provisions make it clear that acute hazardous waste, non-acute hazardous waste, and residues of clean ups of hazardous waste are all considered in making a generator's monthly category determination.

Hazardous Waste Counting

TABLE 1 to § 262.13—Generator Categories Based on Quantity of Waste Generated In A Calendar

Month

Quantity of acute hazardous waste generated in a calendar month	Quantity of non-acute hazardous waste generated in a calendar month	Quantity of residues from a cleanup of acute hazardous waste generated in a calendar month	Generator Category
> 1 kg	Any amount	Any amount	Large quantity generator
Any amount	≥ 1,000 kg	Any amount	Large quantity generator
Any amount	Any amount	> 100 kg	Large quantity generator
≤ 1 kg	> 100 kg and < 1,000 kg	≤ 100 kg	Small quantity generator
≤ 1 kg	≤ 100 kg	≤ 100 kg	Very small quantity generator



Comparison of Old § 261.5 vs. New § 262.13

New	Old
262.13 Introductory Text A generator must determine its generator category. A generator's category is based on the amount of hazardous waste generated each month and may change from month to month. This section sets forth procedures to determine whether a generator is a very small quantity generator, a small quantity generator, or a large quantity generator for a particular month, as defined in § 260.10 of this chapter.	
262.13 (a) & (b) (a) Generators of either acute hazardous waste or non-acute hazardous waste. A generator who either generates acute hazardous waste or non-acute hazardous waste in a calendar month shall determine its generator category for that month by doing the following: (1) Counting the total amount of hazardous waste generated in the calendar month; (2) Subtracting from the total any amounts of waste exempt from counting as described in paragraphs (c) and (d) of this section; and (3) Determining the resulting generator category for the hazardous waste generated using Table 1 of this section. (b) Generators of both acute and non-acute hazardous wastes. A generator who generates both acute hazardous waste and non-acute hazardous waste in the same calendar month shall determine its generator category for that month by doing the following: (1) Counting separately the total amount of acute hazardous waste and the total amount of non-acute hazardous waste generated in the calendar month; (2) Subtracting from each total any amounts of waste exempt from counting as described in paragraphs (c) and (d) of this section; (3) Determining separately the resulting generator categories for the quantities of acute and non-acute hazardous waste generated using Table 1 of this section; and (4) Comparing the resulting generator categories from paragraph (b)(3) of this section and applying the more stringent generator category to the accumulation and management of both non-acute hazardous waste and acute hazardous waste generated for that month.	



Comparison of Old § 261.5 vs. New § 262.13

New	Old
(c) When making the monthly quantity-based determinations required by this part, the generator must include all hazardous waste that it generates, except hazardous waste that: (1) Is exempt from regulation under 40 CFR 261.4(c) through (f), 261.6(a)(3), 261.7(a)(1), or 261.8; (2) Is managed immediately upon generation only in on-site elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in 40 CFR 260.10; (3) Is recycled, without prior storage or accumulation, only in an on-site process subject to regulation under 40 CFR 261.6(c)(2); (4) Is used oil managed under the requirements of 40 CFR 261.6(a)(4) and 40 CFR part 279; (5) Is spent lead-acid batteries managed under the requirements of 40 CFR part 266 subpart G; (6) Is universal waste managed under 40 CFR 261.9 and 40 CFR part 273; (7) Is a hazardous waste that is an unused commercial chemical product (listed in 40 CFR part 261 subpart D or exhibiting one or more characteristics in 40 CFR part 261 subpart C) that is generated solely as a result of a laboratory clean-out conducted at an eligible academic entity pursuant to § 262.213. For purposes of this provision, the term eligible academic entity shall have the meaning as defined in § 262.200; or (8) Is managed as part of an episodic event in compliance with the conditions of subpart L of this part.	261.5(c) (c) When making the quantity determinations of this part and 40 CFR part 262, the generator must include all hazardous waste that it generates, except hazardous waste that: (1) Is exempt from regulation under 40 CFR 261.4(c) through (f), 261.6(a)(3), 261.7(a)(1), or 261.8; στ (2) Is managed immediately upon generation only in on-site elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in 40 CFR 260.10; στ (3) Is recycled, without prior storage or accumulation, only in an on-site process subject to regulation under 40 CFR 261.6(c)(2); στ (4) Is used oil managed under the requirements of 40 CFR 261.6(a)(4) and 40 CFR part 279; στ (5) Is spent lead-acid batteries managed under the requirements of 40 CFR part 266, subpart G; στ (6) Is universal waste managed under 40 CFR 261.9 and 40 CFR part 273; (7) Is a hazardous waste that is an unused commercial chemical product (listed in 40 CFR part 261, subpart D or exhibiting one or more characteristics in 40 CFR part 261, subpart C) that is generated solely as a result of a laboratory clean-out conducted at an eligible academic entity pursuant to §262.213. For purposes of this provision, the term eligible academic entity shall have the meaning as defined in §262.200 of Part 262.



Comparison of Old § 261.5 vs. New § 262.13

New	Old
262.13(d) (d) In determining the quantity of hazardous waste generated in a calendar month, a generator need not include: (1) Hazardous waste when it is removed from on-site accumulation, so long as the hazardous waste was previously counted once; (2) Hazardous waste generated by on-site treatment (including reclamation) of the generator's hazardous waste, so long as the hazardous waste that is treated was previously counted once; and (3) Hazardous waste spent materials that are generated, reclaimed, and subsequently reused on site, so long as such spent materials have been previously counted once.	261.5(d) (d) In determining the quantity of hazardous waste generated, a generator need not include: (1) Hazardous waste when it is removed from on-site storage; or (2) Hazardous waste produced by on-site treatment (including reclamation) of his hazardous waste, so long as the hazardous waste that is treated was counted once; or (3) Spent materials that are generated, reclaimed, and subsequently reused onsite, so long as such spent materials have been counted once.
262.13 (e) (e) Based on the generator category as determined under this section, the generator must meet the applicable independent requirements listed in § 262.10. A generator's category also determines which of the provisions of §§ 262.14, 262.15, 262.16 or 262.17 must be met to obtain an exemption from the storage facility permit, interim status, and operating requirements when accumulating hazardous waste.	

Mixing

Mixing Solid Waste with Hazardous Waste - What changed?

- Reorganization distinguished VSQGs mixing requirements from those for SQGs and LQGs
- Clarified VSQGs mixing solid waste with hazardous wastes and generating characteristic waste must count that waste towards their generator category for that month
- Made clear that SQGs and LQGs mixing solid wastes with hazardous wastes are subject to certain restrictions and requirements.

Reference 40 CFR § 262.13 (f)

Mixing: Why the Changes?

- Changes are designed to clarify the language that was found at §§ 261.5(h) and (i) which addressed the mixing of hazardous waste and nonhazardous waste by a VSQG and the implications to its generator category if the mixture is determined to be a hazardous waste.
- The language specifically addressed how the regulations apply when VSQG hazardous waste is mixed with nonhazardous solid waste and the resulting combination exceeds the VSQG quantity limits.
- The previous §§ 261.5(h) and (i) had not evolved with the changes to the SQG and CESQG regulations through the years, leaving ambiguities.
- The previous regulations also did not specifically discuss SQGs and LQGs mixing solid wastes with hazardous wastes in the generator provisions.

Marking and Labeling

Marking and Labeling
Marking and labeling requirements apply throughout the hazardous waste management regulations.

Final Rule: What changed?

- Container and tank labels must have the words "Hazardous Waste" and also indicate the hazards of the contents of the containers
- Flexibility in how to comply with this new provision; can indicate the hazards of the contents of the container using any of several established methods (e.g., DOT hazard communication, OSHA hazard statement or pictogram, NFPA chemical hazard label, or RCRA characteristic)
- For containment buildings, the generator can keep this information in logs or records near the accumulation unit (waste piles, etc.)
- Note, the labels are not required to include the identity of the contents of the container (as proposed)

The applicable hazardous waste characteristic (i.e., ignitable, corrosive, reactive, toxic)

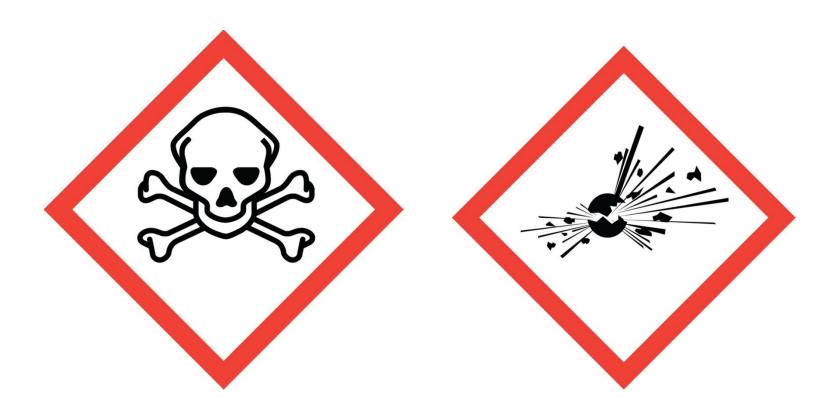




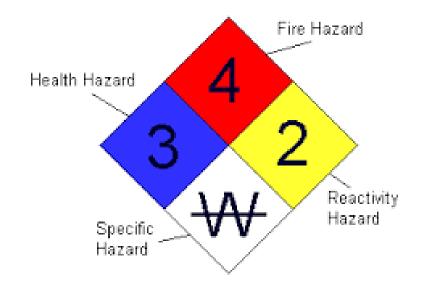
Hazard communication consistent with DOT (49 CFR part 172 subpart E – labeling or subpart F – placarding)



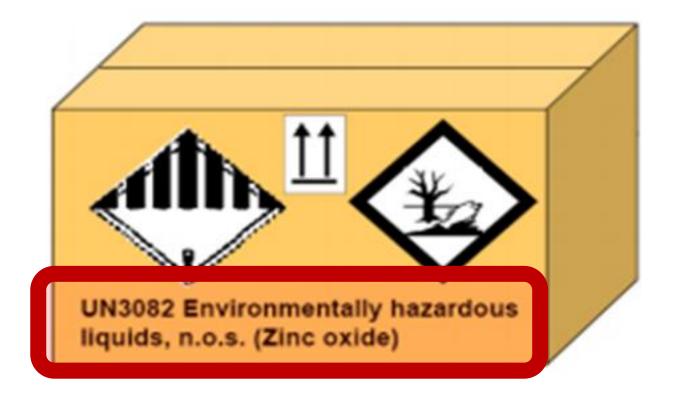
Hazard statement or pictogram consistent with OSHA (29 CFR 1910.1200)



Chemical hazard label consistent with the National Fire Protection Association code 704

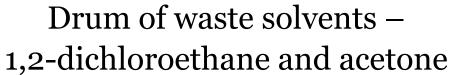


Chemical hazard label consistent with the United Nations (UN) numbers



Compliance Example











Bulk Drum in Central Storage Area for satellite accumulation containers







Marking and Labeling

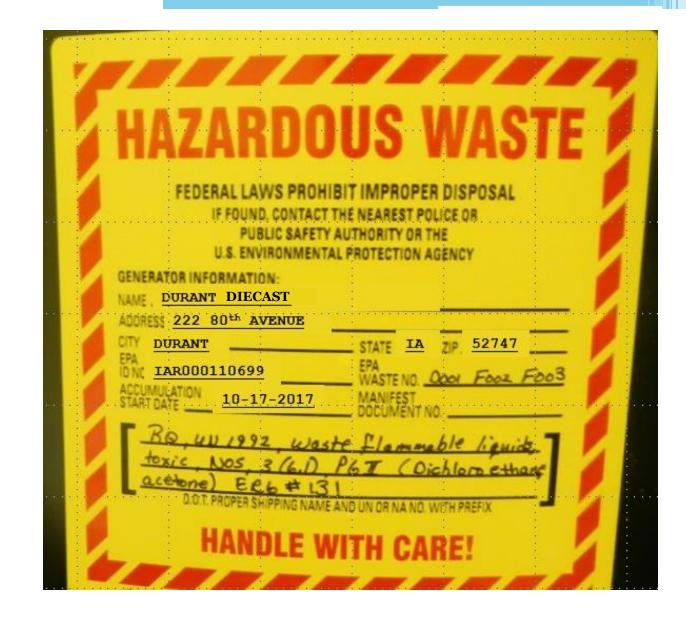
• EPA is providing flexibility on how to indicate the hazards of the contents of the containers

- Some clarifications:
 - Labeling should occur at the initial point of generation
 - For containers that have small containers inside (e.g., tubes, vials, etc.), generators can mark the outer/secondary container or attach a tag with the required information
 - For containers that are in a container that already has appropriate marking and labeling (e.g., a CCP in its original container with an intact label), the existing marking and labeling is sufficient, provided it indicates the hazards of the chemical

Marking and Labeling

Per §262.32, Generators must add the RCRA waste codes before shipping waste off-site

- This allows receiving TSDFs to know how to treat the wastes to meet land disposal restriction requirements
- Generators must mark their containers with the applicable RCRA waste codes or use a bar-coding system that performs the same function



Marking and Labeling - Why the Changes?

- Previous RCRA labeling regulations did not require generators to identify and indicate the hazards of hazardous wastes accumulated in containers, tanks, and containment buildings
 - Resulted in a failure to communicate risks associated with wastes being accumulated/stored in different locations
 - Can impact workers, waste handlers, emergency responders and visitors
- Areas affected include:
 - Generator satellite accumulation areas and central accumulation areas
 - Transfer facilities consolidating hazardous wastes from different generators
 - Generator container and tank storage areas at TSDF

Module 3: Revisions that Apply to Very Small Quantity Generators

Contents of Module 3

- Episodic Generation
- VSQG Consolidation



- Applicable to VSQGs and SQGs.
- New part 262 subpart L allows generators that temporarily change their generator category as a result of an episodic event to operate under streamlined requirements.
- All hazardous waste from episodic events must be shipped by hazardous waste transporter with a hazardous waste manifest to a RCRA-designated facility (TSDF or recycler).
- § 262.13(c)(8) states that hazardous waste managed as part of an episodic event does not have to be counted toward a generator's category
- Part 262 subpart L (§§ 262.230-262.233) contains the conditions for the episodic generation provision.

What is an Episodic Event?

- Episodic event means an activity or activities, either planned or unplanned, that does not normally occur during generator operations, resulting in an increase in the generation of hazardous wastes that exceeds the calendar month quantity limits for the generator's usual category.
- Planned episodic event means an episodic event that the generator planned and prepared for, including regular maintenance, tank cleanouts, short-term projects, and removal of excess chemical inventory
- *Unplanned episodic event* means an episodic event that the generator did not plan or reasonably did not expect to occur, including production process upsets, product recalls, accidental spills, or "acts of nature," "such as tornado, hurricane, or flood."* (§ 262.231)

^{*} Okay, we get it – no hurricanes in Iowa. But the reg uses that explicit language. We'll humor it and make the legal cite, but from here on out – we say fire, not hurricane. THANKS! ☺

Events Per Year

- One episodic event per year + one opportunity to petition Region 7 EPA (for Iowa)/ authorized State for a second event
- A generator can complete multiple projects during the time limit for the episodic event
- Petition process allows a total of 1 unplanned and 1 planned event per year
 - For example:
 - A generator conducts a clean out in the Spring and then has an chemical/material spill in October
 - A generator plans a small episodic project for the Fall but a flash flood causes facility damage in July



Duration of an Episodic Event

- The first day of an episodic event is the first day of generation of waste for the event—for an unplanned event, this is the first day of the storm, spill, other unexpected event
- An episodic event can last 60 days
- All hazardous waste must be shipped off site by the end of 60 days or that waste counts toward the generator's category and must be managed under the regulations for that category of generator
- Time frame should allow waste from unplanned events to be characterized and allow arrangements for disposal to be made
- If a generator doesn't know if the event is going to be episodic, we recommend notification

Notification

- Both VSQGs & SQGs must notify about episodic events using Site ID from (EPA form 8700-12)
- Planned event: notify 30 or more days prior to the episodic event on Site ID form
- Unplanned event: notify within 72 hours of the event by phone or email and follow-up with Site ID form

Notification elements

- A VSQG must get an EPA ID number (automatic upon submitting the Site ID form)
- Start and end dates of the episodic event (no more than 60 calendar days)
- Reason for the event
- Types of hazardous waste
- Estimated quantities of hazardous waste
- Emergency coordinator contact information

Hazardous Waste Accumulation Standards

Necessary to ensure protective management of larger quantities of hazardous waste

VSQGs

Marking and labeling:

- "Episodic hazardous waste"
- An indication of the hazards of the contents; and the date the episodic event began
 - For tanks, inventory logs or other records are appropriate, but must be accessible
- Manage the hazardous waste in a manner that minimizes the possibility of an accident or release
 - · Containers should be in good condition, chemically compatible with contents, and kept closed
 - Part 265 subpart I would satisfy this condition
 - Tanks must have procedures in place to prevent overflow (*e.g.*, a means to stop inflow such as a waste feed cutoff system or bypass system to a standby tank when hazardous waste is continuously fed into the tank). Tanks must be inspected at least once each operating day.
- Treatment is not allowed by VSQGs (except in an on-site elementary neutralization unit).

Hazardous Waste Accumulation Standards

Necessary to ensure protective management of larger quantities of hazardous waste

SQGs

Marking and labeling:

- "Episodic Hazardous Waste;"
- An indication of the hazards of the contents and the date the episodic event began
 - For tanks, inventory logs or other records are appropriate, but must be accessible
- All conditions of 262.16 (e.g., container and tank standards, employee training, emergency preparedness and prevention)
- Hazardous wastes on drip pads and in containment buildings cannot be managed under subpart L

Recordkeeping

- Cradle to grave management of hazardous waste is required
- Records must be maintained for 3 years from the completion of each event

Elements

- Beginning and end date of the episodic event
- A description of the episodic event
- Types of hazardous wastes generated
- Quantities of hazardous wastes generated
- How the hazardous waste was ultimately managed and the name of the RCRAdesignated facility or facilities that received the hazardous waste
- Name of the hazardous waste transporter(s)
- Approval letter from Region 7 EPA if a petition was submitted and approved for a second event

Copies of the notification form and the hazardous waste manifest cover most of the elements.

Petition for a Second Event

• If petition is approved, total of one planned and one unplanned event per calendar year

Petition requirements

- Made in writing
- Include reason for the event; nature of the event; estimated amount of hazardous waste to be managed; how the waste will be managed; estimated length of the episodic event; and information about the previous event in the calendar year

Planned event

- Petition submitted to Region 7 EPA (for Iowa)/authorized State 30 or more days prior to the event
- Generator may not manage hazardous waste from a planned second episodic event under subpart L until approval is received on its petition

<u>Unplanned event</u>

- Region 7 EPA (for Iowa) /authorized State must be notified within 72 hours by phone or
 email, followed by submittal of 8700-12 and an indication that this is a petition for a second event
- Generators can manage hazardous waste from an unplanned second episodic event under subpart
 L while waiting for approval of its petition
- If a petition is denied, generator must start managing hazardous waste under the conditions for the applicable generator category.

Episodic Generation - Example 1

Planned event: In July 2017, our fictitious Durant Diecast (an SQG) planned a facility-wide project in the Fall and anticipated they were likely to exceed the SQG limit of 1000 kg in September/October 2017.

- The event started September 1, 2017, and was scheduled to be completed by October 27, 2017. Sixty days are over on October 31, 2017.
 - This COULD be an EPISODIC EVENT!
- Preparation by an SQG (Durant Diecast):
 - Identify waste codes for waste to be generated and estimates waste amounts
 - Notifies Region 7 EPA on or before August 02, 2017, using the Site ID form (30 days before the event begins with <u>EPA form 8700-12</u>)
 - Sets up contracts and plans for waste transport and management. All waste must have been off-site by October 31st.

OMB# 2050-0024; Expires 05/31/2020

United States Environmental Protection Agency RCRA SUBTITLE C SITE IDENTIFICATION FORM SQG or VSQG Notification of Episodic Obtaining or updating an EPA ID number for an on-going regulated activity that will continue for a period of **Generation Event** 13. Episodic Generation Are you an SQG or VSQG generating hazardous waste from a planned or unplanned episodic event, lasting no more than 60 days, that moves you to a higher generator category. If "Yes", you must fill out the Ad-2. She EPA ID Num dendum for Episodic Generator. IA 3. Site Name 222 805 AVENUE City, Town, or Village Durant County Cedar Comments (include item number for each comment) Street Adds City, Town, # 5mall tout is hazardous waste generator, doing maintenance & disposing of Various wasts. 6. Site Land Type Private 7. North American (Frima



EPA ID Number I A 9 0 0 0 1 / 0 6 9 9

OMB# 2050-0024; Expires 05/31/2020

ADDENDUM TO THE SITE IDENTIFICATION FORM: EPISODIC GENERATOR



ONLY fill out this form if:

You are an SQG or VSQG generating hazardous waste from a planned or unplanned episodic event, lasting no
more then 60 days, that moves the generator to a higher generator category pursuant to 40 CFR 262 Subpart L.
Note: Only one planned and one unplanned episodic event are allowed within one year; otherwise, you must
follow the requirements of the higher generator category. Use additional pages if more space is needed.

Episodic Event								
1. Planned			2. Unplanned					
□ Excess chemical inventory removal □ □ Tank cleanouts □ Short-term construction or demolition □ Equipment maintenance during plant shutdowns □ Other Disposal of Items !			Accidental spills Production process upsets Product recalls "Acts of nature" (Tornado, hurricane, flood, etc.)					
3. Emergency Conta		4. Emergency Con	ntact Name		a = 36 .			
5. Beginning Date <u>9/1/2017</u> (mm/dd/yyyy)		6. End Date 10/27/2017 (mm/dd/yyyy)						
Waste 1								
7. Waste Description Disposal of Items		1	8. Estimated Quantity (in pounds) 1200 lbs					
9. Federal and/or State Hazardous Waste Codes								
D001	D005	D007	D035	D040	F003			

Episodic Generation - Example 1 (continued)

Planned event: In July 2017, our fictitious Durant Diecast (an SQG) planned a facility-wide project in the Fall and anticipated they would likely to exceed the SQG limit of 1000 kg in September/October 2017.

- Durant Diecast (an SQG) Event in September & October 2017:
 - Completed facility-wide project, managed the hazardous waste under 262.16
 standards and sent all waste for hazardous waste management.
 - Had the event or waste management run past 31 October, the Durant would have operated as an LQG.
- After the Durant Diecast Event is over:
 - Durant Diecast (an SQG) maintains records for the event for 3 years (a description of the event and notifications & manifests).
 - If Durant Diecast (as an SQG or even VSQG) has ANOTHER unplanned episodic event in 2017 after this project is over, it has to petition Region 7 EPA for the second event.

Episodic Generation - Example 2

Unplanned event: The clean-up last Fall was a tremendous success. Thanks to good planning and purchasing, Durant Diecast became a VSQG! Then the Winter Thaw/Spring of 2018 came and it was very wet. In April 2018, normally mild mannered Mud Creek, which runs adjacent to Durant Diecast (now a VSQG) greatly overflowed and flooded Durant Diecast. This caused damage of materials whose clean up will cause them to exceed the 100 kg limit for May and June 2018.

- The storm and flooding start on Friday, April 13, and flood waters don't recede until April 22. It is deemed safe to re-enter and begin cleanup efforts on April 25. April 25 is the first day of the unplanned event. Durant Diecast (now a VSQG) isn't sure if spilled chemicals from the various departments are hazardous waste but they suspect they may be. Sixty days are over on June 24, 2018.
- Fortunately, this was neither a total catastrophic nor major regional event. Had it been, they could have had discussions with Region 7 EPA for formal enforcement discretion for greater time.
 - This CAN be an EPISODIC EVENT!

Episodic Generation - Example 2 (continued)

Unplanned event: In April 2018, Durant Diecast (now a VSQG) was flooded. The area was deemed safe to start cleanup on April 25. The flooding caused damage of materials whose clean up will cause them to exceed the 100 kg limit for May and June 2018.

- Durant Diecast (a VSQG) UNPLANNED Event in April to June 2018:
 - notifies Region 7 EPA within 72 hours by call or email of April 25 & follows up with the Site ID form (EPA form 8700-12). This happens to be their first Episodic event in 2018 (even though it is less than one year from the Fall 2017 event).

Had there been a previous event in 2018, Durant Diecast would have needed to petition to Region 7 EPA. The may operate under episodic standards while waiting for petition approval from EPA Region 7.

- Durant Diecast samples hazardous waste and sets up hazardous waste transportation and disposal
 - If the clean up material is deemed non-hazardous or is less than the VSQG threshold, the Durant Diecast can work with Region 7 EPA to cancel the event.
- Durant Diecast completes cleanup, manages the hazardous waste under VSQG episodic generator standards and sends all waste for hazardous waste management by June 24th.
- Had the event or waste management runs past June 24th, the Durant must begin operating as an SQG or LQG, as appropriate). They finished in early June due to good planning!

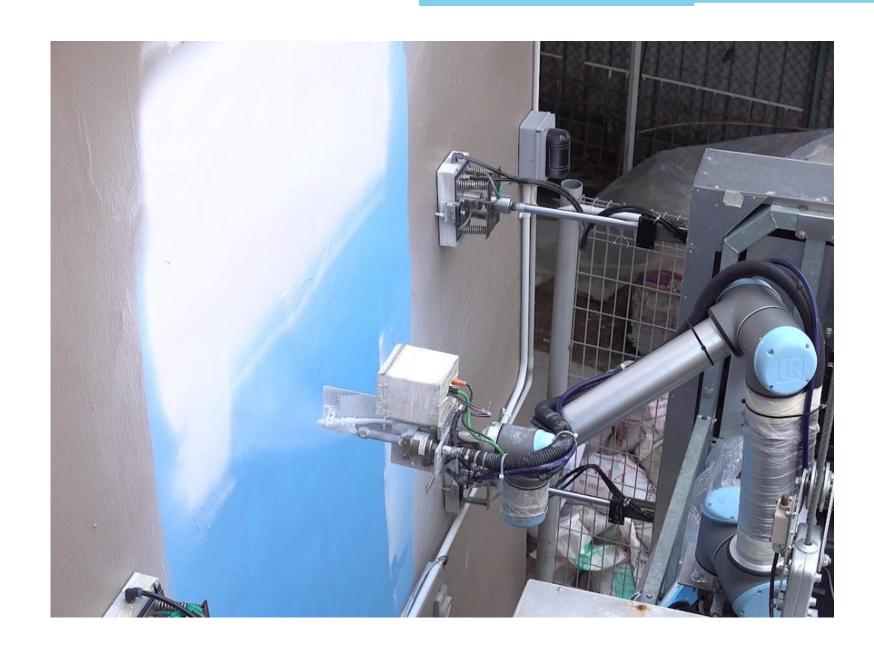
Episodic Generation - Example 2 (continued)

Unplanned event: In April 2018, Durant Diecast (now a VSQG) was flooded. The area was deemed safe to start cleanup on April 25. The flooding caused damage of materials whose clean up will cause them to exceed the 100 kg limit for May and June 2018.

- After the Durant Diecast UNPLANNED Event is over :
 - Durant Diecast (now a VSQG) maintains records for the event for 3 years (notifications and manifests)
 - If Durant Diecast has ANOTHER episodic event (planned) in 2018 after the clean up is over, Durant Diecast will need to petition Region 7 EPA for a second event.
 - Hopefully, Durant Diecast won't have another unplanned event but should there be another calamity, Durant Diecast will need to petition for that second Episodic event (and may operate under the episodic standards while awaiting Region 7 EPA approval of that petition).



Ex. 2 Episodic





Ex. 2 Episodic

The entire episodic process, event start to manifest waste off-site is 60 days?

- Correctly sequence the events, from start to finish.
- Put a * by the steps a VSQG does NOT need to take. NOT APPLICABLE
- Put an X by the management action that is NOT allowable under episodic generation.
- 7 Record key elements (beginning & end dates, event description, types & quantities HW generated, how HW ultimately managed & where, HW transporter, and R7 Approval of Petition (if submitted/approved)
- 1 Manage tanks/containers to minimize accident or release
- 3 Determine whether the event is [circle correct choice] planned

unplanned

- 8 Retain records for three years
- 6 Manifest episodic waste off-site to a designated facility (TSDF)
- X Manage episodic waste on drips pads or in containment buildings
- 4 Notify the EPA using form 8700-12 about the episodic event [circle correct choice]
 30-days prior with-in 72 hours of the event
- 2 Mark and date hazardous waste containers/tanks
- 5 Label episodic hazardous waste as "episodic hazardous waste"

Issue that the New Consolidation Provision Addresses

- Some companies/entities would like to be able to consolidate wastes from their own VSQG sites for more efficient shipping and hazardous waste management
 - Reduces liability for company as a whole by ensuring proper management of hazardous waste
 - Sending to a RCRA-designated facility is the most environmentally sound option
 - Previously, an LQG needed a RCRA permit to receive VSQG wastes

Final Consolidation Provision

- Consolidate waste at an LQG under the control of the same person:
 - Person as defined under RCRA in § 260.10 means an individual, trust, firm, joint stock company, Federal Agency, corporation (including a government corporation), partnership, association, State, municipality, commission, political subdivision of a State, or any interstate body
 - Control means the power to direct policies at the facility
 - the Iowa Board of Regents is such a 'person' and UoI, ISU, UNI, Iowa School for the Deaf, and Iowa Braille and Sight Saving School are under its control
 - our mythical Durant Diecast is a subsidiary of DD Inc. of Osage, IA, with other mythical franchise sites around the State. Durant Diecast is such a person and is under its control of DD Inc. (DDI).
- VSQG requirements
 - Marks and labels waste containers with "Hazardous Waste" and the hazards (as discussed in Module 2)
- No hazardous waste manifest is required and hazardous waste transporters do not have to be used

LQG requirements

- Notifies Region 7 EPA (for Iowa) / authorized State on <u>Site ID Form</u> that it is participating in this activity and identifies which VSQGs are participating
- Recordkeeping for each shipment normal business records
- Manages consolidated waste as LQG hazardous waste including ensuring final treatment or disposal is at a RCRA-designated facility (TSDF or recycler)
- Reports in <u>Biennial Report</u> there will be a different source code for the VSQG consolidated waste to distinguish from the LQG's own generated waste

We did not extend this provision to SQGs due to more complicated implementation issues but an SQG can participate <u>if</u> they notify and act as an LQG (meeting all LQG requirements including getting the VSQG HW off-site in 90 days)

LQG Notification for Consolidation of VSQG waste

14. LQG Consolidation of VSQG Hazardous Waste



Are you an LQG notifying of consolidating VSQG Hazardous Waste Under the Control of the Same Person pursuant to 40 CFR 262.17(f)? If "Yes", you must fill out the Addendum for LQG Consolidation of VSQGs hazardous waste.

Check "Y" if LQG consolidating VSQG waste

ADDENDUM TO THE SITE IDENTIFICATION FORM: LQG CONSOLIDATION OF VSQG HAZARDOUS WASTE



ONLY fill out this form if:

You are an LQG receiving hazardous waste from VSQGs under the control of the same person. Use additional
pages if more space is needed.

VSQG 1						
1. EPA ID Number (if assigned) IAR000110699 2. Name Durant Diecast						
3. Street Address 222 80 th Avenue						
4. City, Town, or Village	Durant	5. State	Iowa		6. Zip Code	52747
7. Contact Phone Number	515-535-0000	8. Contact Name Eubie Safer				
9. Email Eubie. Safer	@Durant.DDI.com					

FAQs about new Consolidation Provision

- When does the 90-day clock start for VSQG consolidated waste?
 - When the VSQG waste gets to the LQG, the 90-day clock to accumulate the waste starts
- Is there any accumulation limit for how much waste can be consolidated at an LQG?
 - No, there is no overall accumulation limit but the waste must be sent off-site to a RCRA TSDF or recycler within 90 days
- Does the LQG add the VSQG waste to its annual generation amount?
 - The LQG would report both its own generated waste and the waste consolidated from its VSQGs on the Biennial Report. However, there will be a different source code for the VSQG waste so they can distinguish between their own HW and the consolidated waste



FAQs about new Consolidation Provision

- When transporting the waste from the VSQG to the LQG, what requirements must be met?
 - There are no specific RCRA requirements for the transport but any applicable DOT requirements would continue to apply
- Is there a quantity limit for shipments from the VSQG?
 - No, but the VSQG has to stay within its own accumulation limit
- Can the VSQG and the LQG be in different states?
 - Yes, if both states have adopted the consolidation provision. If the HW is transported through other states, the generator should check with the transit state to see if they can pass through
- What marking and labeling should be on the containers?
 - At the VSQG, the words "Hazardous Waste" and the hazards
 - At the LQG, the words "Hazardous Waste," the hazards, and the accumulation start date

VSQG Waste Consolidation - Example

- Durant Diecast (that fictitious DDI franchise) is a VSQG [pretend we are also in 2018 to be consistent with our mythology] and could consolidate their hazardous waste at the headquarters facility in Osage, IA (DDI-Osage), an LQG.
 - Durant Diecast could transport the waste themselves and would not need to manifest it as long as DDI-Osage (the LQG) has so notified, including a list of participating VSQGs on the <u>Site ID form</u>
 - Durant Diecast (the VSQG) would need to mark their containers with the words
 "Hazardous Waste" and the hazards of the waste in the containers. For example, if
 they generate spent solvents that are ignitable, the containers could be marked:



VSQG Waste Consolidation - Example

- Once the Durant Diecast (a VSQG) waste arrives at DDI-Osage (an LQG), DDI-Osage would add the accumulation start (arrival) date and manage the waste as LQG waste, including getting it off-site to a TSDF in 90 days
- DDI-Osage, as an LQG, would also keep the shipping records of the waste received from Durant Diecast (a VSQG) for 3 years
 - These records would include:
 - the name, address, and contact info for the Durant Diecast (the VSQG), and
 - a description of the waste received, including the quantity and date the Durant Diecast waste was received
- DDI-Osage (the LQG) would report the Durant Diecast (VSQG) waste consolidated at their site on their Biennial Report using the new source code

Wastes Received by an LQG from VQGSs Under the Control of the Same Person				
Code	Source Code Description			
G51	Hazardous wastes received by an LQG from VSQGs under the control of the same person			



Consolidation



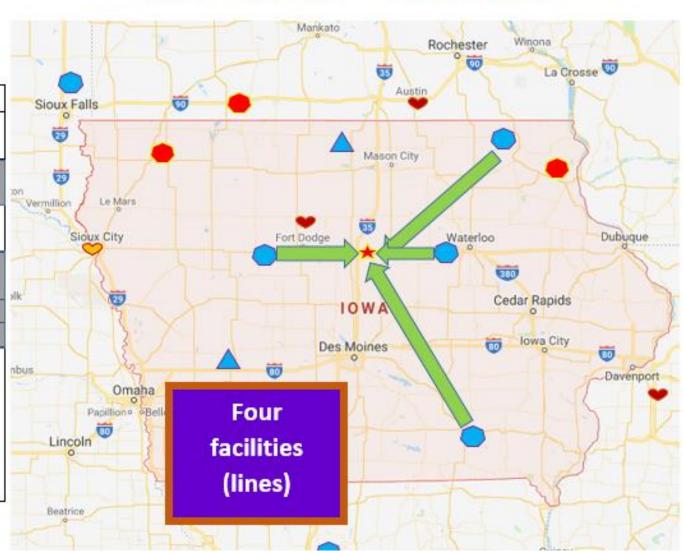
The VSQG must mark and label the container with hazardous waste and hazard nature.

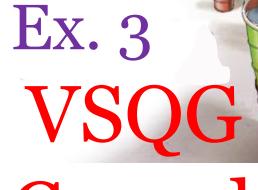
LEGEND:

Map symbol	Facility	GEN
*	Jayne Dear Local Plant/shop	LQG
•	Jayne Dear Local Plant/shop	SQG
	Jayne Dear Local Plant/shop	VSQG
	My Dear Local Plant/shop	VSQG
w	Hater Local Mfg	VSQG
	Hater Local Mfg HQ	LQG

headquarters facility has the

power to direct policies)





Consolidation

Module 4: Changes to SQG and LQG Requirements

Contents of Module 4

- Satellite Accumulation Areas
- SQG Re-notification
- Emergency Preparedness and Planning
- Waiver to 50-Foot Requirement
- Biennial Reporting
- Closure

Satellite Accumulation Areas

Reorganization and Clarifications

- Satellite Accumulation Area requirements are now found in their own part of the generator regulations §262.15
- Clarifications include:
 - Explicitly state that hazardous wastes not be mixed or placed in a container with other hazardous wastes that are incompatible – applying the same storage standard for Satellite as Central Accumulation Areas in regard to incompatible wastes
 - Allow containers to remain open temporarily under limited circumstances, when necessary for safe operations
 - Provides maximum weight (1 kg) in addition to volume (1 quart) for acute hazardous waste limit

More Clarifications to Satellite Accumulation Area requirements

- Clarifies that "three days" means three consecutive calendar days for when waste must be moved to Central Accumulation Area or permitted TSDF
- Rescinds memo allowing reactive hazardous waste to be stored away from the point of generation
 - If waste is so dangerous it needs to be stored separately, then it needs to go directly to the
 Central Accumulation Area
- Makes marking and labeling requirements consistent with central accumulation areas
 - Labeled with the words "Hazardous Waste" and the hazards
 - Do not need an accumulation start date but do need to move in 3 calendar days when
 accumulation limit is reached either to the Central Accumulation Area or TSDF



Preamble Clarification for Satellite Accumulation Areas (SAA)

"Under the Control of the Operator" means:

- The operator is someone familiar with the operations generating the HW
- Is aware of and able to attend to these operations, if needed
- Provides some measure of controlled access

Some examples of demonstrating the SAA is under the control of an operator:

- The operator controls access to SAA by access card, key, or lock box
- The operator accumulates waste in a locked cabinet and controls access to the key (even if access to the room is not controlled)
- The operator is regularly in view of the SAA during the course of their job
- The operator is able to see if anyone enters or exits the SAA

NOTE: There can be more than one operator having control of the SAA

SQG Re-notification

§ 262.18(d) Re-notification

- (1) A small quantity generator must re-notify EPA starting in 2021 and every four years thereafter using <u>EPA Form 8700–12</u>. This renotification must be submitted by September 1st of each year in which re-notifications are required.
- We expect many states to allow electronic reporting. EPA made the timeframe off-cycle with the <u>Biennial Report</u> to reduce the impact on state programs.
- SQGs located in states with more frequent re-notification should comply with the state's timeframe.

SQG Re-Notification - Why the Change?

- Previously, SQGs were only required to notify once when obtaining a RCRA Identification number.
- EPA and many states have outdated information since SQGs may have gone out of business, changed regulatory category, etc.
 - Many notifications occurred over 30 years ago

United States Environmental Protection Agency RCRA SUBTITLE C SITE IDENTIFICATION FORM



SQG must check this box to re- notify	V	Obtaining or updating an EPA ID number for an on-going regulated activity that will continue for a period of time. (Includes HSM activity)				
		Submitting as a component of the Hazardous Waste Report for	(Reporting Year)			
		Site was a TSD facility and/or generator of > 1,000 kg of haza waste, or > 100 kg of acute hazardous waste spill cleanup in (or State equivalent LQG regulations)				
		Notifying that regulated activity is no longer occurring at this Site				
		Obtaining or updating an EPA ID number for conducting Electronic Ma	nifest Broker activities			

Submitting a new or revised Part A Form

1. Reason for Submittal (Select only one.)

- Generator Rule made a wide variety of revisions to the emergency planning and preparedness requirements.
 - SQG regulations—§§262.16(b)(8) & (9)
 - LQG regulations—§ 262.17(a)(6) refers generators to part 262 subpart M
- Revisions are designed to improve emergency responders' ability to respond to events, improving compliance with existing requirements, and clarifying ambiguous regulations.
 - Scope of regulations
 - Contingency Plan Quick Reference Guide
 - Documentation of Arrangements
 - Technical Changes

Scope of the Emergency Preparedness and Planning Regulations

- Previous emergency preparedness regulations in part 262.34 stated that generators must comply "with the requirements for owners and operators in subparts C and D in 40 CFR part 265" for LQGs and "the requirements of subpart C of part 265" for SQGs
- Subparts C and D of part 265 do not include applicability statements relevant to generators of hazardous waste, making it unclear where these requirements apply at a generator's site
- Revised regulations clearly specify that the emergency planning and preparedness requirements apply where hazardous waste is being generated or accumulated at the generator's site—includes points of generation, satellite accumulation areas, and central accumulation areas (90-day areas)
- One-Plan is still applicable for generators under multiple statutes

Contingency Plan Quick Reference Guide

- The Quick Reference Guide is a new part of an LQG's contingency plan designed to provide easy access for emergency responders to the most critical information for an immediate response to an event
- New LQGs submitting contingency plans to also include a Quick Reference Guide (described as an Executive Summary in proposed rule)
- Existing LQGs to include a Quick Reference Guide when they otherwise update and submit their contingency plan

 $(\S 262.262)$

Contingency Plan Quick Reference Guide - Contents (eight elements)

- Types/names of hazardous waste and associated hazards
- Estimated maximum amounts of hazardous wastes
- Hazardous wastes requiring unique/special treatment
- Map showing where hazardous wastes are generated, accumulated or treated at the facility
- Map of facility and surroundings to identify routes of access and evacuation
- Location of water supply
- Identification of on-site notification systems
- Name of emergency coordinator(s) or listed staffed position(s) and 7/24-hour emergency telephone number(s)
- EPA encourages generators to work with local emergency authorities and others to identify additional information that could be included

Contingency Plan Quick

Contingency plan quick reference guide

ABC FACILITY 1000 SW Main Street Anytown, Iowa 50000

Facility Contacts:

Primary Emergency Coordinator: George Washington Mobile Number (24/7): 515-555-0000
Secondary Emergency Coordinator: Abraham Lincoln Mobile Number (24/7): 515-555-0001
Tertiary Emergency Coordinator: Martha Washington Mobile Number (24/7): 515-555-0002

Note: ABC Facility operates 3 shift, 24/7, but the order of contact during an emergency is listed above.

Hazardous Waste Information:

Name of Waste	Waste Codes/Hazards	Location	Maximum Amounts	Response Notes	Special Notes to
		Accumulated	Present		Hopsital/Treatment
					personnel
Paint Related	D001 (ignitability, flash point	NW corner of	Five, 55-gallon drums	If personnel come into direct	None
Wastes (liquid)	<140 °F); F003, F005	Warehouse,	(2,065 pounds)	contact with material,	
	(Benzene, Methyl Ethyl	hazardous waste		decontamination at the	
	Ketone, Toluene, Toxicity)	storage area		hospital may be required prior	
				to treatment.	
Paint Related	D001 (ignitability, flash point	Two Satellite	One, 55-gallon drum	If personnel come into direct	None
Wastes (liquid)	<140 °F); F003, F005	Accumulation	(440 pounds)	contact with material,	
	(Benzene, Methyl Ethyl	Areas as noted with		decontamination at the	
	Ketone, Toluene, Toxicity)	blue asterisks on		hospital may be required prior	
		the attached map.		to treatment.	
Off-specification 2,	D016 (toxicity); Flashpoint	SW corner of	Off-Spec – 1 tank,	Use PPE to prevent contact	Contact Chemtrac
4-D , a herbicide,	190 °F.	warehouse near	1,000 gallons	with skin and eyes.	for emergency
(brand name is		new product	New product – 1 tank	Immediately prevent spills	medical treatment
Amine 4) (liquid)		storage of Amine 4.	(same tank as off-spec),	from entering drains and	information at 1-
			1,000 gallons	waterways. Prevent sources of	800-424-9300.
				ignition and open flames.	If in eyes, wash eyes
					for several minutes.

Emergency Preparedness and Planning

Contingency Plan Quick

Hazardous Waste Storage Area. Waste Paint Related Material Paint Booth Decreto Paint Related Material Paint Booth Decreto Paint Related Waste Material Anione 4 Storage (1,000 galon tank) **Satellite Accumulation Area for Paint Related Waste Material (D001, F003, F005) **Fire Alarms (ring on-site only, there are no fire alarms that notify off-site personnel)

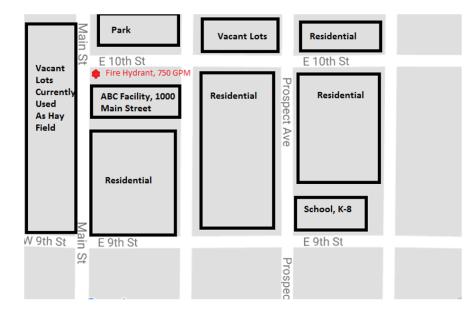
- * Telephone for off-site notification of emergency
- Indicates evacuation route out of the building.

Note 1: Hazardous waste (paint related waste) is generated and accumulated inside each of the two paint booths, and is accumulated in the hazardous waste storage area. Amine 4 can be a hazardous waste if it is off-specification and it is generated and accumulated in the SW corner at the Amine 4 tank

Note 2: Smoke detectors are located throughout the office and main warehouse on the ceiling, in a grid about every 25 feet. Smoke detectors are connected to an automatice sprinkler system.

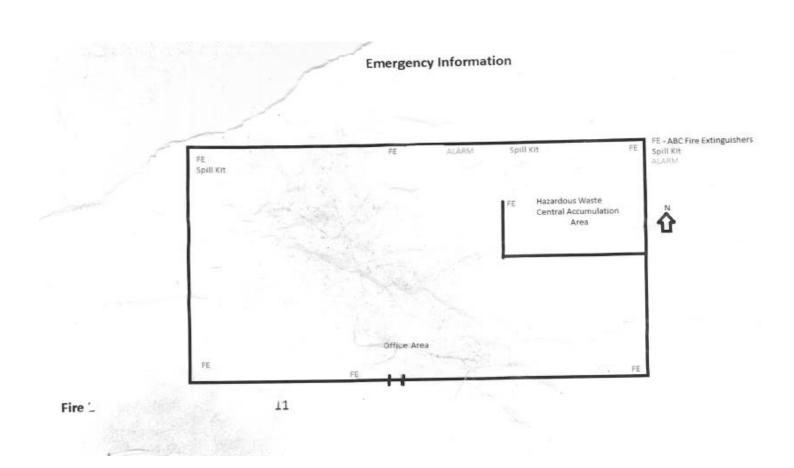
Emergency Preparedness and Planning





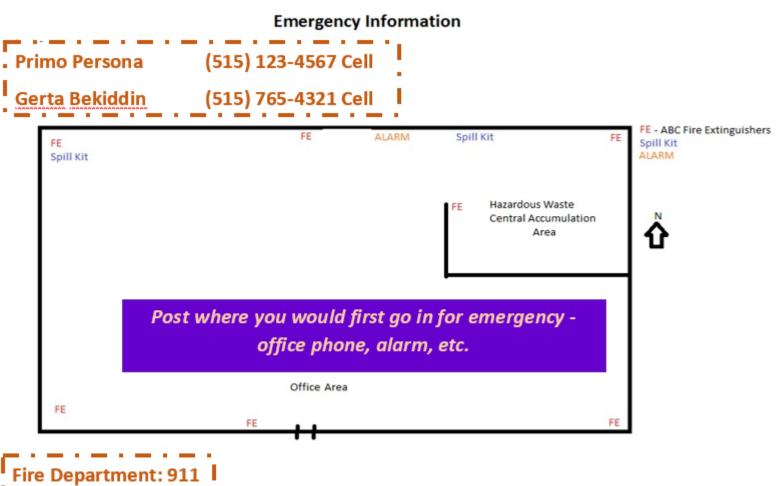


Ex. 4 SQG
Emergency
procedures





Ex. 4 SQG
Emergency
procedures





Ex. 5 Contingency Plan Changes



Contingency plan quick reference guide [extract]

ABC FACILITY, 1000 SW Main Street, Anytown, Iowa 50000

Facility Contacts:

Ex. 5

Contingency Plan

Changes

rimary Emergency Coordinator: Ima Goin Mobile Number (24/7): 515-555-0000

Home address 321 Perfect Street, Anytown, Iowa 50000 515 555 0079

Primary

Secondary Emergency Coordinator: Ura Upnext Mobile Number (24/7): 515-555-0001

Home address 45 Treelined Street, Anytown, Iowa 50000 515 555 0123

Secondary

Tertiary Emergency Coordinator: Perma Ployee Mobile Number (24/7): 515-555-0002

Home address 1011 SW Main Street, Anytown, Iowa 50000 515 555 1119

Note: ABC Facility operates 2 shifts, M-F. The order of contact during an emergency is listed above.

Place a check by the elements of the Contingency Plan Quick Reference Guide

emergency coordinator(s) & phone number(s) - 24/7	estimated max amount HW	types/names HW & hazard	facility map, access & evacuation
HW require special treatment	map show HW locations		map show water supply
ID on-site notification systems	show best pizza joint	fire dept. address	emergency coord home info

Making and Documenting Arrangements with Local Emergency Responders

- The requirement for generators to make arrangements with local emergency responders is found in the previous regulations in part 265 subpart C (§ 265.37), applicable to both SQGs and LQGs.
- § 262.37(b) stated that when the state or local authorities refused to enter into agreements, it must be documented.
- Under the revisions, generators must document that they have attempted to make arrangements with local emergency responders (or that arrangements were sought but not obtained) and keep the documentation in the facility's operating record
- No specific form or type of documentation is required and additional flexibility is provided regarding where documentation can be retained

(§ 262.16(b)(8)(vi) & § 262.256)



- LQGs can eliminate unnecessary employee personal information in the contingency plan (§ 262.261(d))
 - Replacing addresses and phone numbers of employees with an emergency telephone number and, where applicable, a position title, as long as the number is staffed at all times
- SQGs and LQGs may determine the most appropriate locations for emergency equipment, when it is not possible or unsafe to have the equipment located immediately next to the generating equipment (§ 262.16(b)(8)(ii)/§ 262.252)
- Add "direct or unimpeded access" as a meaning for the term "immediate access" in SQG and LQG regulations (§ 262.16(b)(8)(iv)/§ 262.254)
- Stating that SQGs the location relevant emergency response information should be posted is "next to the telephone" (§ 262.16(b)(9)(ii))
- Clarify that SQGs have the option to use contractors to address releases (containment/cleanup) (§ 262.16(b)(9)(iv)(B))
- Large facilities with internal response capabilities may seek a waiver from entering into arrangements with local authorities (§ 262.16(b)(8)(vi)(C)/§ 262.256(c)

Waiver to 50-Foot Requirement

What changed?

• Final rule allows LQGs to approach the authority having jurisdiction over the fire code (e.g., fire marshal or fire department) to apply for a site-specific waiver from this requirement if the authority having jurisdiction believes that the precautions taken by the facility make the waiver appropriate and safe (§262.17(a)(1)(vi)). The authority having jurisdiction will help the LQG determine a safe and practical location. The LQG is then required to keep the written approved waiver in their records.

Why the change?

• The generator regulations previously required that containers holding ignitable or reactive waste be located at least 15 m (50 feet) from the facility's property line, with no exceptions. Meeting this requirement could be impossible, especially in urban areas where properties are sometimes less than 100 feet wide

Biennial Reporting

- Clarifies in regulation that LQGs must complete and submit Biennial Reports
- Requires LQGs to provide specific information found in <u>EPA Form 8700–13 A/B</u> rather than citing outdated information previously found at § 262.41 (a)(1)-(8)
- Requires in regulation that LQGs identify all of the hazardous wastes they generated throughout the year, not just for months generator was LQG Note: The Agency did not finalize proposal to change reporting periods.
- Requires LQGs consolidating VSQG waste to identify volumes and types of wastes but with new source code
- Requires facilities not storing hazardous wastes prior to recycling to complete Biennial Reports

Recycler Who Needs to Report

United States Environmental Protection Agency RCRA SUBTITLE C SITE IDENTIFICATION FORM



1. Reason for Submittal (Select only one.)

Obtaining or updating an EPA ID number for an on-going regulated activity that will continue for a period of time. (Includes HSM activity)

Submitting as a component of the Hazardous Waste Report for 2017 (Reporting Year)

Site was a TSD facility and/or generator of > 1,000 kg of hazardous waste, > 1 kg of acute hazardous waste, or > 100 kg of acute hazardous waste spill cleanup in one or more months of the reporting year (or State equivalent LQG regulations)

Notifying that regulated activity is no longer occurring at this Site

Obtaining or updating an EPA ID number for conducting Electronic Manifest Broker activities

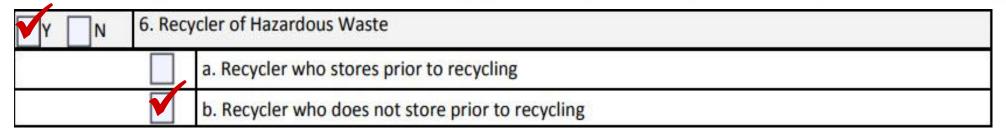
Submitting a new or revised Part A Form

New Reporting Requirements: What Changes?

Facilities Not Storing Hazardous Wastes Prior to Recycling: Changes to Site ID Form as part of Biennial Report submission

10. Type of Regulated Waste Activity (at your site)

Mark "Yes" or "No" for all current activities (as of the date submitting the form); complete any additional boxes as instructed.



Check both boxes if you are a recycler who doesn't store

Quick primer -- Closure

- When the LQG ceases operation of a hazardous waste storage or treatment unit, they must comply with disposal and decontamination standards the closure requirements
- Clean closure means the facility has controlled, minimized, or eliminated the post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products
- If the LQG demonstrates the contaminated soils and wastes cannot be practicably removed or decontaminated, then the unit is considered a landfill. This in turn compels post-closure requirements (monitoring, etc.).

Closure: What Changed?

- Consolidates closure requirements in one place
- Requires LQGs to notify Region 7 EPA/authorized state when closing a facility and/or accumulation unit
- Requires LQGs accumulating hazardous wastes in containers to close as a landfill if unable to meet closure performance standards; i.e., they can't clean close
- Clarifies that closure does not apply to Satellite Accumulation Areas

Why did we make changes?

- Previous regulations confusing and contradictory
- Consolidates and streamlines regulations to improve user-friendliness
- Closes important gaps:
 - Prior to this rule, EPA and most states had no idea when an LQG closed its facility or waste accumulation unit
 - LQGs accumulating hazardous wastes in tanks, containment buildings and drip pads must close as landfill (or equivalent) if unable to meet closure performance standards
 - LQGs accumulating hazardous wastes in containers had no such requirements
 - Yet, numerous damage cases found where LQGs accumulating hazardous wastes in containers abandoned their facility leaving EPA and/or states to clean up as Superfund removal action – often costing millions

Closure Notification

Requires LQGs to notify Region 7 EPA/authorized state when closing a facility via Site ID form

- 30 days *prior* to closing facility and
- 90 days *after* closing facility and complied with closure performance standards
- Extension requests must be submitted within 75 days after closing

Provides option of LQG closing waste accumulation unit to:

- Place a notice in operating record within 30 days *after* closing waste accumulation unit and addressing closure when facility closes, OR
 - Notice can be removed from the operating record if unit going back into service
- Notify Region 7 EPA /authorized state they have met closure performance standards for containers, tanks, and containment buildings (§262.17(a)(8)(iii)) or closure performance standards for drip pads (§262.17(a)(8)(iv))
 - 90 days *after* closure via Site ID form 8700-12

LQG Notification of Closure

15. Notification of LQG Site Closure for a Central Accumulation Area (CAA) (optional) OR Entire Facility (required)

•	Y N	LQG Site Closure of a Central Accumulation Area (CAA) or Entire Facility.		
TC// 99 3	, .	A. Central Accumulation Area (CAA) Entire Facility		
If "yes," sel appropria		B. Expected closure date: 07/04/2017 mm/dd/yyyy		
option for	· A.	C. Requesting new closure date: mm/dd/yyyy		
	= - - -	D. Date closed : mm/dd/yyyy 1. In compliance with the closure performance standards 40 CFR 262.17(a)(8) 2. Not in compliance with the closure performance standards 40 CFR 262.17(a)(8)		

For B, C, and D, only fill out *ONE* depending on your closure stage

Closure Requirements

- Consolidates performance standards found in § 265.111 and §265.114 into LQG section (§262.17(a)(8)(iii)&(iv)) and clarifies that these units are subject to clean closure standards
- LQGs for containers, tanks, and containment buildings must:
 - 1. Minimize and control post-closure care releases of hazardous waste and constituents to the environment
 - 2. Remove or decontaminate all contaminated structures, equipment, and soils
 - 3. Manage any hazardous waste generated in the process of performing closure according to Subtitle C
 - 4. If the LQG cannot clean close then they must close as a landfill and meet the requirements of Subparts G and H of 40 CFR 265

Note: LQG drip pad operators are subject to 1 and 3 above and 265 Subpart W in lieu of 40 CFR 265 Subparts G and H



Closure: Comparison of New vs. Old Requirements

NEW	OLD
§ 262.17 (a) (8) (i) Notification for closure of a waste accumulation unit. (ii) Notification for closure of the facility.	
(iii) Closure performance standards for containers, tank systems, and containment building waste accumulation units.	
(A) At closure, the generator must close the waste accumulation unit or facility in a manner that:	§ 265.111 The owner or operator must close the facility in a manner that:
(1) Minimizes the need for further maintenance by controlling, minimizing, or eliminating, to the extent necessary to protect human health and the environment, the post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere,	(a) Minimizes the need for further maintenance, and (b) Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere, and (c) Complies with the closure requirements of this subpart, including, but not limited to, the requirements of §§265.197, 265.228, 265.258, 265.280, 265.310, 265.351, 265.381, 265.404, and 265.1102.



Closure: Comparison of New vs. Old Requirements

NEW OLD

- (2) Removes or decontaminates all contaminated equipment, structures and soil and any remaining hazardous waste residues from waste accumulation units including containment system components (pads, liners, etc.), contaminated soils and subsoils, bases, and structures and equipment contaminated with waste, unless § 261.3(d) of this chapter applies.
- (3) Any hazardous waste generated in the process of closing either the generator's facility or unit(s) accumulating hazardous waste must be managed in accordance with all applicable standards of parts 262, 263, 265 and 268 of this chapter, including removing any hazardous waste contained in these units within 90 days of generating it and managing these wastes in a RCRA Subtitle C hazardous waste permitted treatment, storage and disposal facility or interim status facility.

§265.114 Disposal or decontamination of equipment, structures and soils.

During the partial and final closure periods, all contaminated equipment, structures and soil must be properly disposed of, or decontaminated unless specified otherwise in §§265.197, 265.228, 265.258, 265.280, or 265.310. By removing all hazardous wastes or hazardous constituents during partial and final closure, the owner or operator may become a generator of hazardous waste and must handle that hazardous waste in accordance with all applicable requirements of part 262 of this chapter.



Closure: Comparison of New vs. Old Requirements

NEW OLD

(4) If the generator demonstrates that any contaminated soils and wastes cannot be practicably removed or decontaminated as required in paragraph (a)(8)(ii)(A)(2) of this section, then the waste accumulation unit is considered to be a landfill and the generator must close the waste accumulation unit and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (§ 265.310 of this chapter). In addition, for the purposes of closure, post-closure, and financial responsibility, such a waste accumulation unit is then considered to be a landfill, and the generator must meet all of the requirements for landfills specified in subparts G and H of part 265 of this chapter.

(iv) Closure performance standards for drip pad waste accumulation units.

At closure, the generator must comply with the closure requirements of paragraphs (a)(8)(ii) and (a)(8)(iii)(A)(1) and (3) of this section, and § 265.445(a) and (b) of this chapter. (v) The closure requirements of paragraph (a)(8) of this section do not apply to satellite accumulation areas.

§ 265.197 (b) If the owner or operator demonstrates that not all contaminated soils can be practicably removed or decontaminated as required in paragraph (a) of this section, then the owner or operator must close the tank system and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (§265.310). In addition, for the purposes of closure, postclosure, and financial responsibility, such a tank system is then considered to be a landfill, and the owner or operator must meet all of the requirements for landfills specified in subparts G and H of this part.

Comparable text found for containment buildings.

Module 5 - Implementation and State Adoption

Contents of Module 5

- Revisions to § 262.10
- State Adoption
- Stringency of the Final Rule
- EPA Resources
- Contacts

Revisions to § 262.10

- § 262.10(a)-(l) has been revised in a variety of ways to clarify the structure of the regulations and remove obsolete provisions.
- Obsolete provisions being removed are—
 - § 262.10(c)—outdated provision from the early days of RCRA when the regulations distinguished between generators that shipped off-site for management and those that were also RCRA-designated facilities
 - § 262.10(j)—Laboratory XL regulations
- §§ 262.10(b), (d), and (l) are updated to reflect the new structure of the regulations, but still point generators to counting requirements, import and export requirements, and regulations for academic laboratories
- §§ 262.10(e), (f), (h), & (i) are unchanged

Independent & Conditional Requirements

- § 262.1 contains definitions of conditions for exemption and independent requirement, used in § 262.10
- § 262.10(a)(1) lists the independent requirements for each generator category

- § 262.10(a)(2) points generators to the conditions for exemption for each generator category
- § 262.10(a)(3) states that hazardous waste must be sent to a designated facility (permitted TSDF or recycler)



Independent & Conditional Requirements (continued)

- In this final rule, EPA outlines in regulatory language the distinction between independent requirements for all generators and conditions for exemption from the storage facility regulations for generators who are accumulating hazardous waste on site
 - This distinction has always existed in RCRA and it has been the Agency's position that generators not complying with a condition of a generator exemption would be considered an operator of a non-exempt storage facility
 - State regulatory agencies will continue to retain discretion and authority regarding bringing enforcement actions when non-compliance with conditions for exemptions have been detected
 - EPA and states have always had, and continue to have, enforcement discretion to bring charges and seek penalties that accurately reflect the seriousness of the violations and their potential for harm

Rule Process & Schedule

- Rule signed on October 28, 2016
- Publication in Federal Register—November 28, 2016 (81 FR 85732)
- Effective Date 6 months from publication—May 30, 2017
- Rule is in effect in Iowa, Alaska, most territories, and tribal lands
 - EPA runs the RCRA program in those States, most territories, and Tribal lands

State Adoption

- Authorized states run the RCRA program in their state and thus, will go through the state adoption & authorization process for this new RCRA rule
 - Authorized states will have to pick up the more stringent provisions, typically by July 1,
 2018 (or July 1, 2019 if state law change is needed)*
 - Authorized states can choose to pick up the less stringent provisions and those provisions that are considered equally stringent

*Some states, including Pennsylvania and New Jersey, adopt by reference. The rule was effective on May 30, 2017 in both those States. Some States are adopting all or portions of the rule by policy. The State of Kansas, by policy action, is following the consolidation, local arrangements, 50-foot waiver, and episodic elements of the Rule (effective August 2, 2017).

Stringency of Final Rule

- More stringent provisions:
 - SQG re-notification
 - SAAs subject to incompatibility and emergency preparedness & prevention requirements
 - Identifying hazards of wastes being accumulated on labels and RCRA waste codes added prior to shipment
 - Notification of closure
 - Closure as a landfill for LQGs accumulating hazardous wastes in containers that cannot meet closure performance standards
 - Biennial reporting for whole year, not just months the generator is an LQG
 - Biennial reporting for recyclers who don't store prior to recycling
 - Quick Reference guide for contingency plans
- Less stringent provisions:
 - VSQG consolidation
 - Episodic generation
 - Waiver from 50-foot rule

EPA resources

Main generator website: https://www.epa.gov/hwgenerators

Generator Improvements Rule website: https://www.epa.gov/hwgenerators/final-rule-hazardous-waste-generator-improvements

We have <u>FAQs</u> (and are developing more), a map showing when states adopt the new rule, and other implementation materials as needed (please suggest what you believe should be developed).

We also plan to update existing guidance and resources as much as possible with new terms and citations, starting with the <u>Hazardous Waste Generator Regulations: A User Friendly</u> Reference Document

Point of Contact

Jim Aycock 913.551.7887 Aycock.Jim@epa.gov Notification (EPA form 8700-12) Points of Contact

James Terry Questions on completing forms

(Senior Environmental Employee contractor)

913.551.7958 Terry. James@epa.gov

Send all notification forms to:

Beth Koesterer

913.551.7673

Koesterer.Elizabeth@epa.gov



RCRA's TOP10



You're the Inspector –

What compliance challenges do you see?

What resources would be helpful

•What new resources would you like to see?



•What materials on our website do you use the most and want us to update with new terms and citations?

PLEASE, e-mail or tell us your suggestions!





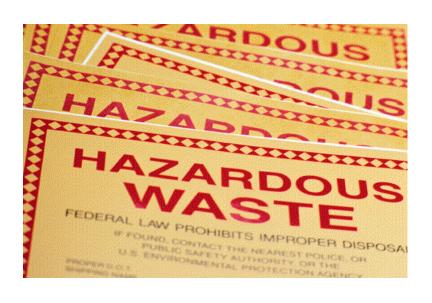
Q&A

Answers or a pledge we WILL get back to you!









HW generators and transporters

- ✓ Generators and transporters will be able to **create, edit, and sign manifests** on-line. They will be able to retrieve copies and status information on manifests.
- ✓ Transporters will be able to locate manifests created by generators that indicate they are the intended transporter.





Those terminating a manifest – both Hazardous Waste & PCB TSDFs

(receiving facilities)

✓ Facilities receiving waste shipped on a manifest will be able to sign manifests when the waste is received, submit the manifests to EPA, make corrections to submitted manifests, and retrieve copies of manifests submitted within the past three years. The manifest system will not include historical data, so data will only be available from July 2018 going forward.





States and Tribes

✓ State and tribal governments will be able to retrieve copies and status information on any manifests associated with entities in their state.





General Public

- ✓ e-Manifest data will be accessible to the general public through the system's publicfacing website.
- ✓ The public information will have a delayed access of up to 45 days from the date the waste is received at the TSDF.





Friday, Jun 1st 2018

Saturday, June 30th

- ✓ This takes effect in all states 30 June 2018.
- ✓ All paper manifests initiated after the effective date will be required to be on the new 5-copy form.
- ✓ The receiving facilities (TSDFs) will begin submitting copies (electronic or paper) to EPA.



Marginal Cost Manifest Fees by Manifest Type [2017\$]

[per manifest fee paid by TSDF to EPA (paying for system)]

Manifest	Year 1 fee	
Paper Manifest Types	Mailed Paper	\$20.00
	Image Uploads	13.00
	Data File Uploads	7.00
Electronic Manifests (includes hybrid)	Electronic	4.00

This table of fee estimates should be interpreted as rough approximations of the final fees. EPA will publish a final two-year schedule of user fees on the e-Manifest website, at www.epa.gov/e-Manifest, when more information about the e-Manifest budget and contracts awards becomes available.